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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/662,940

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Kimball C. Chen

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HUNTON & WILLIAMS LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
2200 Pennsylvania Avenue, N.W.  
WASHINGTON, DC 20037

EXAMINER

BORISSOV, IGOR N

ART UNIT

PAPER NUMBER

3628

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/662,940	<b>Applicant(s)</b> CHEN ET AL.	
	<b>Examiner</b> IGOR BORISSOV	<b>Art Unit</b> 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05/02/2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-432 is/are pending in the application.
- 4a) Of the above claim(s) 4-6, 9-12, 14, 16, 18, 20-151, 153-179, 183-185, 188-191, 193, 195, 197, 199-330, and 332-432 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-432 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/02/2011 has been entered.

### ***Response to Amendment***

Amendment received on 05/02/2011 is acknowledged and entered. Claims 4-6, 9-12, 14, 16, 18, 20-151, 153-179, 183-185, 188-191, 193, 195, 197, 199-330, and 332-432 are withdrawn from consideration. Claims 1 and 180 have been amended. Claims 1-432 are currently pending in the application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3, 7, 8, 13, 15, 17, 19, 152, 180-182, 186, 187, 192, 194, 196, 198 and 331 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Jr. et al. (US 5,544,036) in view of Woolard et al. (US 6,178,362).**

Brown, Jr. et al. (Brown) teaches a computer-implemented method and system for remote energy management and home automation system, said system including a central computer 24, a communication device (controller 14), and a communication link (transmitter 20), said method comprising:

Claims 1 and 180,

receiving a monitor data message comprising one or more resource-consumption by, resource-production by, operating characteristics of, and operational state of (“when it is necessary”) of at least one device of the plurality of remote devices (receiving data from energy consuming devices including meter data and operational status of devices via transceiver 54 and/or telephone interface 48, and controllers 26 and 28) (C. 5, L. 53-66; C. 6, L. 1-6, 12-14, 15-22, 28-41);

automatically (by the central computer 24) generating at least one informational message at a central computer responsive to the monitor data message (C. 4, L. 7-18; Figs. 1, 2; C. 6, L. 28-41);

transmitting the at least one informational message to at least one communication device (controller 14) (C. 4, L. 7-14),

where the at least one communication device (controller 14) initiates at least one action having the effect of providing a change of one or more of resource-consumption

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by, resource-production by, operating characteristics of, and operational state of one or more of the at least one device of the plurality of remote devices (C. 4, L. 7-18).

Brown does not explicitly teach that said central computer includes a server. However, the use of a computer as a server is old and well known. For example, Woolard et al. (Woolard) teaches a method and system for remote energy management and home automation system, said system including a central server 60 (Fig. 3), which is configured to be in control communication with peripheral energy consuming devices D (C. 7, L. 37-38, 8-15). Further, Woolard teaches monitoring energy usage of various devices (HVAC); analyzing received data regarding energy consumption, and, based on the analysis of the received data, changing energy usage patterns including starts and stops of the devices (HVAC) to minimize operational costs and prevent an abnormal operation of the devices (C. 5, L. 13-14, 23-26, 52-55; C. 6, L. 4-6; C. 7, L. 9-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Brown to include that said central computer includes a server, as disclosed in Woolard, because it would advantageously allow to implement said system for multi-building facility, and interconnect various energy consuming devices for purposes of monitoring and control, as well as optimizing energy consumption, as specifically stated in Woolard (C. 7, L. 32-35).

Claims 2 and 181, Brown teaches said method and system, wherein the at least one informational message comprises at least one control signal and wherein the at least one communication device comprises at least one interface unit, where the

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interface unit in communication with the one or more devices controls the at least one device in accordance with the at least one control signal, to take an action having the effect of providing a change of one or more of resource-consumption and resource-production attributed to the at least one device (Fig. 1, 2; C. 3, L. 26-28; C. 4, L. 7-18; C. 5, L. 9-33).

Claims 3 and 182, Woolard teaches: receiving at least one command at the central server (60 (Fig. 3); C. 5, L. 47-51). As per the at least one command is related to controlling at least one device and wherein the at least one informational message is generated based on the at least one command, Brown teaches said feature (See reasoning above). The motivation to combine references would be to provide tools for developing strategies to reduce energy costs (Woolard; C. 5, L. 49).

Claims 7 and 186, Brown teaches said method and system, wherein the at least one informational message comprises an instruction directed to one or more of activating and deactivating the at least one device (C. 4, L. 7-14).

Claims 8 and 187, Brown teaches said method and system, wherein the at least one informational message comprises an instruction to adjust the operation of the at least one device wherein the instruction to adjust the operation is directed to one or more of state, use, one or more parameters, one or more set points, operating

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characteristics, duty cycle, control logic and scheduling of the at least one device (C. 4, L. 44-51).

Claims 13, 14, 152 and 192, 194, 331, Woolard teaches said method and system, wherein the at least one command is generated in accordance with a user profile (C. 6, 45-52; C. 7, L. 4-11).

Claims 17 and 196, Brown teaches said method and system, wherein the devices comprises one or more of an air-conditioner, boiler, motor starter and heater (C. 4, L. 63-66).

Claims 19 and 198, Brown teaches said method and system, wherein the interface unit causes the adjustments of one or more of resource-consumption and resource-production attributed to the at least one device in accordance with the at least one informational message (C. 4, L. 10-19, 47).

### ***Response to Arguments***

Applicant's arguments filed 05/02/2011 have been fully considered but they are not persuasive.

**Applicant argues** that the combination of Brown and Woolard fails to disclose, or even suggest, a method for controlling one or more of resource-consumption and resource-production associated with a plurality of remote devices, comprising: ***"automatically generating*** at least one informational message at a central server ***responsive to the monitor data message"***.

**In response** to this argument it is noted that Brown discloses receiving data from energy consuming devices including meter data and operational status of devices via transceiver 54 and/or telephone interface 48, and controllers 26 and 28 (C. 5, L. 53-66; C. 6, L. 1-6, 12-14, 15-22, 28-41). Further, Brown teaches (C. 4, L. 4-18) (emphasis added):

In certain instances, the energy management and automation functions programmed by the user may be overridden by the utility company when it is necessary to reduce the consumption in a particular area. In this situation, utility command center computer 24 provides signals to transmitter 20, which, in turn, provides appropriate paging messages to the various controllers 14. These messages may cause certain appliances, such as heating or cooling units or water heaters, to be turned off, for selected times, such as for fifteen minutes, or for alternate ten minute increments over a defined period. Alternatively, the paging messages generated as a result of actions by the utility command center computer 24 may only require the selective disabling of



certain appliances, such as reducing the temperature at which a heating unit can turn on, or increasing the temperature at which a cooling can unit turn on.

From this paragraph it is clear that informational messages/signals are generated automatically, by the utility command central computer 24, in response to the sensed/developed condition in the grid caused by energy consumed by the certain appliances/remote devices situated at the utility customers' premises.

To this end the Examiner points out that Woolard also discloses said feature. Specifically, Woolard teaches monitoring energy usage of various energy consuming devices (HVAC); analyzing the received data regarding energy consumption, and, based on the analysis of the received data, changing energy usage patterns including starts and stops of the energy consuming devices (HVAC) to minimize operational costs and prevent an abnormal operation of the devices (C. 5, L. 13-14, 23-26, 52-55; C. 6, L. 4-6; C. 7, L. 9-14).

The remaining applicant's arguments essentially repeat the arguments presented above; therefore, the responses presented by the examiner above are equally applicable to the remaining applicant's arguments.

### ***Conclusion***

This is a Request for Continued Examination (RCE) of applicant's earlier Application No. 10/662,940. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Igor N. Borissov/

Primary Examiner, Art Unit 3628

07/17/2011